

THE REQUIREMENT TO MODEL BUSINESS PROCESS COMPLEXITY MEASURE

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THE REQUIREMENT TO MODEL BUSINESS PROCESS COMPLEXITY MEASURE

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ABSTRACT

Business process is the collection of task and activities that takes one or multiple inputs and create a single or multiple outputs. It covers the people who conduct it, the tools they used to assist them, the production they follow and the flow of material and information between various people, groups and sub-activities. A complex business process should be well managed its complexity so that it could be used as a measure for doing improvement. Business process complexity measure can be described as a type of measure that occur in each item that connected in business process within their different domain that based on their organization goals for performance. To implement a complexity measure for business process, we should refer to the model used. Basically, there should have elements known as requirements that is a capability needed to achieve the goal of complexity measure model development. For that reason, this paper will suggest the several requirements that should have for modelling a business process complexity measure.

ABSTRAK

Proses perniagaan merupakan satu koleksi kerja-aktiviti-aktiviti yang mempunyai satu atau berbagai input dan mencipta satu atau berbagai output. Ia merangkumi manusia yang mengendalikannya, peralatan yang digunakan, pengeluaran yang diikuti dan aliran material dan juga maklumat yang ada diantara berbagai jenis manusia, kumpulan dan juga sub-sub aktiviti. Sebuah proses perniagaan yang kompleks sepatutnya diuruskan dengan baik kompleksitinya supaya ia dapat digunakan sebagai sebuah ukuran bagi menjalankan pembaikan. Pengukuran kompleksiti bagi proses perniagaan boleh dikatakan sebagai jenis ukuran yang terdapat di dalam setiap item yang berhubung dalam proses perniagaan dari domain yang berbeza-beza yang berasaskan matlamat organisasi untuk tujuan persembahan pengurusan. Untuk mengimplementasikan pengukuran kompleksiti bagi rekabentuk proses perniagaan, ia perlulah merujuk kepada model yang digunakan. Secara asasnya, ia memerlukan elemen-elemen yang dikenali sebagai keperluan yang merupakan satu keupayaan untuk tujuan memenuhi matlamat bagi pembangunan sesebuah model ukuran kompleksiti. Oleh sebab itu, kertas ini akan mencadangkan beberapa keperluan yang sepatutnya ada untuk memodelkan satu ukuran kompleksiti bagi proses perniagaan.

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LIST OF ABBREVIATIONS

CNC	Coefficient Network Complexity
CI	Complexity Index
RT	Restrictiveness Estimator
ERV	Ericsson Mobile Data Design
GQM	Goal Question Metric
BPR	Business Process Reengineering

CHAPTER ONE

INTRODUCTION

1.1 Business Process

Business processes are central to the functioning of an organization. A business process could be described as comprising the people who conduct it, the tools they used to assist them, the production they follow and the flow of material and information between various people, groups and sub-activities. Business process is the creation of value to internal and external customer through collection of tasks and activities that takes one or multiple inputs and creates a single or multiple outputs. Business process is an important variable in understanding the nature and interrelation among activities within complex corporations. (Fathee et al.,1998). Furthermore, business processes can be considered as complex and dynamic chains of human activities, supported by technology, connected by material and information flows and integrated into an economic value chain to create value for the customer and profit for stakeholders.(Latva Kovisto ,2001) (as cited in Smeds et al.,1999).

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